

LISTING OF CLAIMS:

Please amend the claims of the application as set forth below.

1. (Currently amended) A method for the reduction or treatment of radiation injury comprising the step of orally administering to a human prior to expected exposure to radiation, during exposure to radiation or after exposure to radiation, a composition which comprises an amount of one or more compounds effective to ~~regulate~~inhibit at least one of cell differentiation and cell proliferation which is effective, when administered orally, to ~~regulate~~inhibit at least one of cell differentiation and cell proliferation, and an effective amount of one or more antioxidants.
2. (Currently amended) A method as claimed in claim 1, wherein the compound that ~~regulates~~inhibits at least one of cell differentiation and cell proliferation is selected from the group consisting of vitamin D₃, vitamin D₃ analogs, compounds that may be converted or metabolized into vitamin D₃ in the human body, and metabolites thereof.
3. (Currently amended) A method as claimed in claim 1, wherein the one or more compounds that ~~regulate~~inhibit at least one of cell differentiation and cell proliferation are selected from the group consisting of: vitamin D₃, 1, 25-dihydroxyvitamin D₃, 1(S), 3(R)-dihydroxy-20(R)-(1-ethoxy-5-ethyl-5-hydroxy-2-heptyn-1-yl)-9, 10-seco-pregna-5(Z), 7(E), 10(19)-triene, and other vitamin D₃ derivatives which ~~regulate~~inhibit at least one of cell differentiation and cell proliferation, and pharmaceutically acceptable salts thereof.
4. (Currently amended) A method as claimed in claim 1, wherein the one or more antioxidants are selected from the group consisting of: ascorbyl palmitate, ascorbic acid, vitamin A, vitamin A ester, vitamin E, vitamin E ester, α-lipoic acid carotenoid, chlorophyllin, chlorophyllin salt, coenzyme Q10, glutathione, green tea polyphenol, galangin, rutin, luteolin, morin, fisetin, silymarin, apigenin, ginkgolides, hesperitin, cyanidin, citrin, curcuminoid, ~~structurally similar derivatives thereof which exhibit antioxidant activity,~~ and pharmaceutically acceptable salts thereof.

5. (Currently amended) A method as claimed in claim 1, wherein the compound that ~~regulates~~inhibits at least one of cell differentiation and cell proliferation comprises vitamin D₃, and the antioxidant comprises ascorbyl palmitate, curcumin, vitamin A palmitate, vitamin E, α -lipoic acid, green tea polyphenol, and chlorophyllin.
6. (Original) A method as claimed in claim 1 wherein the antioxidant comprises one or more antioxidant enzymes.
7. (Original) A method as claimed in claim 1, wherein the composition further comprises at least one compound selected from the group consisting of: flavonoids and flavonoid derivatives.
8. (Original) A method as claimed in claim 7, wherein the flavonoids and flavonoid derivatives are selected from the group consisting of: 1,2,3,6-tetra-o-gallyol- β -d-glucose; 2'-o-acetylacetoside; 3,3',4-tri-o-methyl-ellagic acid; 6,3',4'-trihydroxy-5,7,8-trimethoxyflavone; 6-hydroxy-luteolin; 6-hydroxykaempferol-3,6-dimethyl ether; 7-o-acetyl-8-epi-loganic acid; acacetin; acetoside; acetyl trisulfate quercetin; amentoflavone; apigenin; apiin; astragalin; avicularin; axillarin; baicalein; brazilin; brevifolin carboxylic acid; caryophyllene; chrysin-5,7-dihydroxyflavone; chrysoeriol; chrysosplenol; chrysosplenoside-a; chrysosplenoside-d; cosmosiin; δ -cadinene; dimethylmussaenoside; diacetylcircimaritin; diosmetin; dosmetin; ellagic acid; ebinin; ethyl brevifolin carboxylate; flavocannibiside; flavosativaside; genistein; gossypetin-8-glucoside; haematoxylin; hesperidine; hispiduloside; hyperin; indole; iridine; isoliquiritigenin; isoliquiritin; isoquercitrin; jionoside; juglanin; kaempferol-3-rhamnoside; kaempferol-3-neohesperidoside; kolaviron; licuraside; linariin; linarin; lonicerin; luteolin; luteolin-7-glucoside; luteolin-7-glucoside; luteolin-7-glucuronide; macrocarpal-a; macrocarpal-b; macrocarpal-d; macrocarpal-g; maniflavone; methy scutellarein; naringenin; naringin; nelumboside; nepetin; nepetrin; nerolidol; oxyyanin-a; pectolinarigenin; pectolinarin; quercetagenin; quercetin; quercimertrin; quercitrin; quercitryl-2'' acetate; reynoutrin; rhamnetin; rhoifolin; rutin; scutellarein; sideritoflavone; sophoricoside; sorbarin; spiraeoside; trifolin; vitexin; and wogonin.

9. (Original) A method as claimed in claim 7, wherein the flavonoids and flavonoid derivatives are selected from the group consisting of: quercetin, quercetrin, myricetin, kaempferol and myrecetrin.
10. (Currently amended) A method as claimed in claim 1, wherein the composition further comprises ~~one or more ingredients selected from the group consisting of selenium and compounds containing selenium.~~
11. (Original) A method as claimed in claim 1, wherein the composition further comprises one or more ingredients selected from the group consisting of organic germanium, Korean ginseng, an extract of Korean ginseng, American ginseng, an extract of American ginseng, Siberian ginseng and an extract of Siberian ginseng.
12. (Original) A method as claimed in claim 1, wherein the composition further comprises one or more ingredients selected from the group consisting of anti-inflammatories, and B-complex vitamins.
13. (Currently amended) A method as claimed in claim 1, wherein a ratio of the amount of the compound that ~~regulates~~inhibits at least one of cell differentiation and cell proliferation to the amount of antioxidant from about 200 IU per gram of antioxidant to about 3 million IU per gram of antioxidant.
14. (Currently amended) A method as claimed in claim 1, wherein a ratio of the amount of the compound that ~~regulates~~inhibits at least one of cell differentiation and cell proliferation to the amount of antioxidant is from about 1800 IU per gram of antioxidant to about 1 million IU per gram of antioxidant.
15. (Currently amended) A method as claimed in claim 1, wherein a ratio of the amount of the compound that ~~regulates~~inhibits at least one of cell differentiation and cell proliferation to the amount of antioxidant is from about 5000 IU per gram of antioxidant to about 200,000 IU per gram of antioxidant.

16. (Currently amended) A method as claimed in claim 1 further comprising the step of applying to an area of skin before, during or after exposure to radiation, a topical composition which comprises an amount of one or more compounds that ~~regulate~~inhibit at least one of cell differentiation and cell proliferation which is effective, when administered topically in the topical composition, to ~~regulate~~inhibit at least one of cell differentiation and cell proliferation, and an effective amount of one or more antioxidants, formulated in a pharmaceutically acceptable topical carrier for a topical composition.

17. (Previously presented) A method as claimed in claim 16, wherein the pharmaceutically acceptable topical carrier comprises a sufficient amount of at least one hydrophilic ointment base to form a topical composition.

18. (Currently amended) A method as claimed in claim 17, wherein the pharmaceutically acceptable topical carrier further comprises a sufficient amount of a panthenol selected from D-panthenol and DL-panthenol to promote penetration of one or more of the antioxidants and compounds which ~~regulate~~inhibit at least one of cell differentiation and cell proliferation into the skin.

19. (Original) A method as claimed in claim 16, wherein the pharmaceutically acceptable topical carrier comprises hydroxymethyl cellulose.

20. (Original) A method as claimed in claim 16, wherein the pharmaceutically acceptable topical carrier comprises an acrylic copolymer dissolved in polyethylene glycol.

21-37. (Canceled)

